



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,886	03/01/2002	Hisao Ooishi	Q68579	8182

7590 03/29/2004

SUGHRUE, MION, ZINN,  
MCPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER
----------

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/084,886

Applicant(s)

OOISHI, HISAO

Examiner

Cynthia Hamilton

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-8 is/are objected to.
- 8) ☒ Claim(s) 1-11 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/1/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Applicant's election without traverse of Group I, claims 1-8 in their Response to Restriction Requirement filed February 19, 2004 is acknowledged.

1. Claims 9-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper filed February 19, 2004.

2. Claims 4-8 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim *cannot depend from any other multiple dependent claim*.

Claim 3 is a multiple dependent claim. Claims 4-8 depend upon claims 1 and 2 and 3. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: In Fig. 4 is found 14b, but no definition in the specification is found for it. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "14d" has been used to designate both mirror and half mirror in figure 4 and cited on page 40 top two lines. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Art Unit: 1752

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "24" has been used to designate both a spatial modulator in Fig. 5 and an inlet in Fig. 6 (page 51). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Reference numbers 25, 29 and 34 in Fig. 6 were not found in the specification by this examiner. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
9. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the method set forth in claim 1 applicants require that it be comprised of the step of "forming a uniform layer of a hydrophobic substance on the entire surface of a printing plate precursor having a titanium dioxide-containing surface layer, by irradiating the surface of

Art Unit: 1752

the precursor with active light to form imagewise hydrophilic areas..." The formation of an entire uniform layer of hydrophobic substance by irradiation to form some hydrophilic areas is confusing. How can a surface be uniformly hydrophobic by being irradiated to form hydrophilic areas? The examiner believes that applicants intended to use language similar to that found on page 4, lines 10-15, of the specification as follows:

**A lithographic printing method comprising forming a uniform layer of a hydrophobic substance on the entire surface of a printing plate precursor having a titanium oxide-containing surface layer, imagewise irradiating the surface of the precursor with active light to form hydrophilic areas to make a printing plate, wherein the active light is far-ultraviolet light having a wavelength of 250 to 320 nm.**

This method clearly has two separate steps, i.e. first forming a uniform layer and second imagewise irradiating the surface of the precursor. The examiner notes with respect to page 4 it is not clear which step is first or if "the precursor" surface irradiated is the "printing plate precursor" before layer formation or only the surface under the layer is made hydrophilic. The use of "the precursor" in reference to irradiation leaves unclear exactly what is irradiated. Is it the titanium oxide layer or some hydrophobic uniform layer on the titanium oxide layer? The wording is a little confusing here. However, the claim language makes no sense to this examiner with respect how a layer is both hydrophobic and hydrophilic in the same step when it is required that the layer is to be formed by a hydrophobic substance which is to be over the entire surface of a printing plate precursor. Thus, the method of claims 1-3 is confusing. The examiner has examined this process as if two steps instead of one were present in this method. The steps examined were the forming a hydrophobic layer then irradiating the thus formed printing

Art Unit: 1752

element light in the wavelength of 250-320 nm. The examiner further notes applicants' preamble in claims 1-3 is "A lithographic printing method" but there are no printing steps in claims 1-8. Only claim 8 references any step regarding printing and that is removing ink after completion of printing. However, there are no printing steps set forth in the instant method claims 1-3. The process as claimed is given it's broadest reasonable interpretation and that is that it has at least the two steps set forth. The preamble with respect to "printing" any thing is taken as an intended use of the product produced by the method, i.e. the printing method of the instant claims is just part of a possible overall printing method. Thus, there is no limitation to a printing step read into the instant method with respect to this examination.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoshi et al (6,534,240) teach processes similar to that of the instant method as evidenced by their example 9 but there is no disclosure of using far ultraviolet radiation in the processes of Hoshi and the 53 degrees water contact angle for the hydrophobic layer on top of the TiO<sub>2</sub> layer was short of the defined applicant's hydrophobicity on page 16 in lines 4-8 of their specification wherein a contact angle of 60 or greater is by definition required to call the uniform cover layer "hydrophobic". Thus, Hoshi teaches the general process without the specificity with respect to using a separate TiO<sub>2</sub> layer underneath the hydrophobic layer, but the instant application requires a much higher hydrophobicity than that of applicants. Since the nature of the hydrophobic layers in each is different, the examiner sees these limitations in the instant invention to be unobvious over the disclosure of Hoshi. Nakayama et al (6,420,091 B1) in col. 22 teach the imagewise formation of hydrophobic sections in layers formed on the TiO<sub>2</sub> layers for lithographic printing plates. There is no disclosure to overall hydrophobe layer being formed

Art Unit: 1752

before imaging. Nakayama et al (6,048,654) is cited as an English equivalent of applicant's cited JP 11-105234. The examiner also makes of record the Machine translated English version of JP 11-174664 A also cited by applicants. These are cited to indicate the examiner did fully explore these references beyond that cited by applicants.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-331. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

*Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).*



**CYNTHIA HAMILTON  
PRIMARY EXAMINER**

Cynthia Hamilton  
Primary Examiner  
Art Unit 1752

March 21, 2004